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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,477	10/16/2003	Jae Yong Park	053785-5134	5449

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EXAMINER

QUARTERMAN, KEVIN J

ART UNIT PAPER NUMBER

2879

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,477

Applicant(s)

PARK ET AL.

Examiner

Kevin Quarterman

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 14-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-13 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments received 20 December 2005 regarding the rejection under 35 U.S.C. § 112, 1st paragraph, have been fully considered and are persuasive. Thus, the rejection of claims 1-13 for failing to comply with the enablement requirement has been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 4-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Park (US 6,870,186).

4. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

5. Regarding independent claim 1, Figure 5 of Park shows an organic electroluminescent display device comprising first and second substrates (110, 130) having a plurality of sub-pixels defined thereon, the first and second substrates being spaced apart from and opposing each other; array element layer (120) on the first substrate, the array element layer having a plurality of thin film transistors (T) corresponding to each sub-pixel; a first electrode (132) on an inner side of the second substrate; an organic light-emitting layer (136) beneath the first electrode; a second electrode (138) corresponding to each sub-pixel beneath the organic light-emitting layer; a plurality of electrical connecting patterns (114) corresponding to each sub-pixel between the array element layer and the second electrode, the electrical connecting pattern being formed of material having a plastic deformation property (col. 8, ln. 54-56); and a seal pattern (140) formed on one of the first and second substrates. The Examiner notes that Park discloses the shape and structure of the electrical connecting patterns may be varied to protect the organic electroluminescent diode from damage caused by pressure from the electrical connecting pattern when the first and second substrates are attached (col. 7, ln. 46-50). Park also discloses the electrical connecting pattern are formed of conductive material having high ductility (col. 8, ln. 54-56). Thus, since Park substantially teaches the identical structure to that of the claims in the instant application—in particular, connecting patterns having a plastic deformation property—Park teaches a height of the electrical connecting pattern being smaller than an original height of the electrical connecting pattern measured before attachment of the first and second substrates (Also see MPEP § 2112.01).

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6. Regarding claim 4, Figure 11 of Park shows a protection electrode (440) between the second electrode and the electrical connecting pattern, wherein the protection electrode has a pattern structure corresponding to the second electrode.

7. Regarding claim 5, Figure 11 of Park shows the electrical connecting pattern electrically connected to the second electrode via the protection electrode.

8. Regarding claim 6, Figure 12 of Park shows a connecting electrode (514a) on the array element layer, wherein the connecting electrode is connected to the thin film transistor.

9. Regarding claim 7, Figure 12 of Park shows the electrical connecting pattern (514b) electrically connected to the thin film transistor via the connecting electrode.

10. Regarding claim 8, Figure 12 of Park shows the thin film transistor having a gate electrode (not labeled), a source electrode (not labeled), and a drain electrode (not labeled), and the connecting electrode (514a) connected to the drain electrode.

11. Regarding claim 9, Figure 12 of Park shows a connecting electrode (514a) on the array element layer, wherein the connecting electrode is connected to the thin film transistor.

12. Regarding claim 10, Figure 12 of Park shows the electrical connecting pattern (514b) electrically connected to the thin film transistor via the connecting electrode.

13. Regarding claim 11, Figure 12 of Park shows the thin film transistor having a gate electrode (not labeled), a source electrode (not labeled), and a drain electrode (not labeled), and the connecting electrode (514a) connected to the drain electrode.

14. Regarding claim 12, Figure 5 of Park shows the electrical connecting pattern formed on the array element layer.

15. Regarding claim 13, Park discloses the organic electroluminescent display of Figure 5 as a top emission type (col. 7, ln. 51-52).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over Park (US 6,870,186).

19. ~~The applied reference has a common inventor with the instant application.~~

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

20. Regarding claim 2, Park teaches the limitations of independent claim 1 discussed earlier but fails to exemplify the height of the electrical connecting pattern being between 80~95% of the original height of the electrical connecting pattern measured before the attachment of the first and second substrates. Park does disclose the shape and structure of the electrical connecting patterns may be varied to protect the organic electroluminescent diode from damage caused by pressure from the electrical connecting pattern when the first and second substrates are attached (col. 7, ln. 46-50).

21. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the electrical connecting pattern of Park with a height being between 80~95% of the original height of the electrical connecting

pattern measured before the attachment of the first and second substrates, since where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation (MPEP § 2144.05 II).

Allowable Subject Matter

22. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record neither shows or suggests an organic electroluminescent display device comprising, in addition to other limitations of the claim, an electrical connecting pattern formed of conductive organic material.

Contact Information

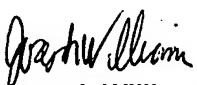
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman
Examiner
Art Unit 2879

kq 
2 March 2006


Joseph Williams
Primary Examiner
Art Unit 2879